



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

JL

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,536	11/05/2003	Gerald W. Solomon	0325	8185
26612	7590	09/23/2004	EXAMINER	
DANIEL B. RUNK				ZEC, FILIP
1400 PROVIDENT TOWER				
ONE EAST FOURTH STREET				
CINCINNATI, OH 45202				
				ART UNIT
				PAPER NUMBER
				3744

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/701,536	SOLOMON, GERALD W.
	<b>Examiner</b>	<b>Art Unit</b>
	Filip Zec	3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 November 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 6/01/04 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,302,948 to Ibrahim et al. Ibrahim discloses applicant's basic inventive concept, a cooling system comprising an evaporator compartment housing (4, FIG. 1), a supply (10, 12) and return (6) air ducts, an evaporator coil disposed within said housing (14) and a fan assembly (16), disposed within said housing, comprising a motor and an impeller adjacent to the return duct and perpendicular to the evaporator coil (see FIG. 1), substantially as claimed with the exception of stating that this system could be used in a HVAC. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Ibrahim, to use this system in a HVAC environment since the elements necessary for cooling of an area are clearly taught (an evaporator, air supply and return, fan assembly).

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,272,876 to Roberts et al. Roberts discloses applicant's basic inventive concept, a cooling system comprising an evaporator compartment housing (44), a supply (38, 40) and return (36) air ducts, an evaporator coil disposed within said housing (64) and a fan assembly (62), disposed within said housing, comprising a motor and an impeller adjacent to the return duct and perpendicular to the evaporator coil (see FIG. 4), substantially as claimed with the exception of

Art Unit: 3744

stating that this system could be used in a HVAC. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Roberts, to use this system in a HVAC environment since the elements necessary for cooling of an area are clearly taught (an evaporator, air supply and return, fan assembly).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,302,948 to Ibrahim et al., in view of U.S. Patent 6,146,094 to Obana et al. Ibrahim discloses applicant's basic inventive concept, a cooling system comprising an evaporator compartment housing, a supply and return air ducts, an evaporator coil disposed within said housing and a fan assembly, disposed within said housing, comprising a motor and an impeller adjacent to the return duct and perpendicular to the evaporator coil, substantially as claimed with the exception of stating the material from which the impellers are made. Obana shows impellers made of Aluminum alloys (col 6, lines 21-22) to be old in the blower art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Obana to modify the system of Ibrahim, by using aluminum alloy to make impellers in order to make the fans and therefore the system, lighter.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent U.S. Patent 6,272,876 to Roberts et al., in view of U.S. Patent 6,146,094 to Obana et al. Roberts discloses applicant's basic inventive concept, a cooling system comprising an evaporator compartment housing, a supply and return air ducts, an evaporator coil disposed within said housing and a fan assembly, disposed within said housing, comprising a motor and an impeller adjacent to the return duct and perpendicular to the evaporator coil, substantially as claimed with the exception of stating the material from which the impellers are made. Obana shows impellers

made of Aluminum alloys (col 6, lines 21-22) to be old in the blower art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Obana to modify the system of Roberts, by using aluminum alloy to make impellers in order to make the fans and therefore the system, lighter.

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 3,324,783 to Hickox, Lester E. teaches a refrigeration system containing an evaporator chamber with a fan perpendicular to the evaporator coil.

U.S. Patent 6,453,694 to Trulaske, Sr., Robert J. teaches a freezing system containing an evaporator chamber with a fan perpendicular to the evaporator coil.

U.S. Patent 3,698,205 to Perez, Arthur teaches a refrigeration system containing an evaporator chamber with a fan perpendicular to the evaporator coil.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Filip Zec whose telephone number is (703) 306-3446. The examiner can normally be reached on Monday through Friday, with the exception of every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (703) 308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Filip Zec  
Examiner  
Art Unit 3744

FZ



DENISE L. ESQUIVEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700